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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,823	01/17/2002	William J. Colucci	7391/72568	5347

22242 7590 03/15/2004

FITCH EVEN TABIN AND FLANNERY  
120 SOUTH LA SALLE STREET  
SUITE 1600  
CHICAGO, IL 60603-3406

EXAMINER
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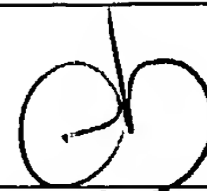
TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/046,823	COLUCCI ET AL. 	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cephia D. Toomer	1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

This Office action is in response to the amendment filed November 26, 2003 in which claims 24-29 were added.

The rejection of claims 1-23 under 35 USC 103(a) is withdrawn in view of Applicant's arguments.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Buckley (US 4,881, 945).

Buckley teaches a fuel soluble alkylphenyl poly (oxyalkylene) aminocarbamate wherein the alkylphenyl poly (oxyalkylene) moiety is prepared from an alkylphenyl group where in the alkyl group is at least 40 carbon atoms and a polyoxyalkylene group such that the polyoxyalkylene group is present in 1-100 units (see abstract; col. 4, lines 50-68; col. 6, lines 20-56; col. 7, lines 18-27). In example 1 (col. 23), Buckley teaches a C<sub>65</sub> to C<sub>70</sub> alkylphenyl poly (oxypropylene) alcohol that is prepared from polybutene phenol.

Accordingly, Buckley teaching all the limitations of the claims anticipates the claims.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley.(US 4,881,945).

Buckley has been discussed above. Buckley teaches an R substituent that meets the number of carbon atoms and molecular weight. However, Buckley does not teach that the R substituent is derived from isobutene and up to about 20 percent by weight n-butene. However, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

5. Claims 1-21 and 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr (US 5,298,039).

Mohr teaches a fuel composition (gasoline) comprising a combination of a nitrogen-containing detergent component and an alkoxylate as a carrier oil component (see abstract). The composition reduces deposits and valve sticking. The phenol is dialkyl substituted with a straight or branched C<sub>6</sub>-C<sub>30</sub> alkyl (30 carbon=400<sup>+</sup> molecular weight) and the alkoxylate (CHR<sub>3</sub>-CHR<sub>3</sub>-O)(R<sub>3</sub> is methyl or H) repeats from 1 to 100

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times (see col. 2, lines 30-43). Mohr also teaches that a monoalkyl substituted propoxylate may be present in the composition (see col. 2, lines 50-64).

The detergent may be imides of PIBSA, PIB amines and long-chain carboxamide and imides (see col. 3, lines 8-29). Additional conventional additives may be present in the composition such as corrosion inhibitors (see col. 3, lines 44-50). Mohr teaches the limitation of the claims other than the differences that are discussed below.

In the first aspect Mohr fails to teach that the alkyl group is derived from C<sub>2</sub> to C<sub>20</sub> alkenes or is polybutyl or polyisobutyl prepared from isobutene and up to 20 percent by weight of n-butene. However, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

In the second aspect, Mohr differs from the claims in that he does not specifically teach that the aryl group is cresol or hydrocarbon-substituted cresol. However, it would be reasonable to expect that the compounds taught by Mohr would function in the same manner given that Mohr teaches a homolog of cresol and also given that the additives of Mohr and the present invention are directed to the same endeavor (reduction of deposits and value sticking).

In the third aspect, Mohr differs from the claims in that he does not specifically teach that the alkylene group of the alkoxylate is 1,4-butylene. However, it would be reasonable to expect that the compound of Mohr would function in the same manner given that Mohr teaches a homolog of 1,4-butylene (propylene) and also given that the additives of Mohr and present invention are directed to the same endeavor.

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6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr, as applied the above claims, further in view EP 878532.

Mohr has been discussed above. Mohr fails to teach that the additional nitrogen-containing detergent is a Mannich base. However, EP teaches this difference.


EP teaches a fuel additive compound comprising a polyether alcohol and a nitrogen containing dispersant. The dispersants may be hydrocarbyl-substituted amines, Mannich bases, amides and imides (see page 6, lines 44 through page 7, lines 1-11). It would have been obvious to one of ordinary skill in the art to have included a Mannich base as the N-containing detergent in the composition because EP teaches the Mannich bases and those nitrogen-containing detergent of Mohr are recognized equivalents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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